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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

11

DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,105

Applicant(s)

VALKENBURG ET AL.

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Schnaars (U.S. Patent 4,997,502).

Schnaars is directed to a method for forming a bag with a sealed interior, i.e. an air bag. Schnaars teaches a bag formed of fabric. Schnaars teaches applying a sealant to the interior of the bag by inserting a mandrel into the open end of the bag, inflating the bag, spraying an adhesive/polymer coating onto the interior surface of the bag, and applying a sealant, i.e. plastic liner, onto the interior surface of the bag by blowing a propellant gas into the sealant such that the sealant is affixed to the interior surface of the bag (Figures 4-7 and Column 1, lines 22-23 and 57-68 and Column 2, lines 1-5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. (WO 98/30748) in view of Seizert (U.S. Patent 5,044,663).

Longardh et al. are directed to a method for forming inflatable air bags utilized in motor vehicles. Longardh et al. teach the bag is formed of synthetic fiber, i.e. fabric. Longardh et al. further teach the inside of the bag is coated with a polymer, e.g. silicone, to provide a sealant layer (Abstract and Page 2, lines 9-18). Longardh et al. are silent as to how the sealant is coated onto the inside of the bag. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the sealant coating taught by Longardh et al. using a method wherein the sealant is applied into the interior of the bag by blowing the sealant with a propellant gas as this was a well known technique in the art for coating the interior of fabric bags with a polymeric sealant wherein the sealant becomes embedded in the fabric as shown for example by Seizert.

Seizert is directed to a method for forming an air bag by blow molding. Seizert teaches a fabric bag structure comprising fabric in areas where reinforcement is needed. Seizert teaches applying a polymeric sealant coating to the fabric to form an air bag. Seizert teaches the sealant

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is in the form of a parison carried on a mandrel wherein propellant gas is blown into the parison from the mandrel to form a sealant coating on the interior of the fabric (Figures 4-6 and Column 5, lines 21-24 and 28-31 and Column 6, lines 3-55).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Seizert as applied above in paragraph 5, and further in view of Schnaars.

Longardh et al. and Seizert as applied above teach all of the limitations in claim 3 except for a teaching on coating the parison with adhesive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use adhesive in Longardh et al. as modified by Seizert to strengthen the bond between the parison and the fabric as it was well known in the art to use adhesive when bonding a sealant to a fabric bag as shown for example by Schnaars. As to applying the adhesive to the parison as opposed to the interior surface of the fabric bag, it would have been well within the purview of one of ordinary skill in the art to apply the adhesive to either the interior surface of the fabric bag or the outside surface of the parison as both would accomplish the same, i.e. adhering the sealant to the fabric.

Schnaars is directed to a method for forming a bag with a sealed interior, i.e. an air bag. Schnaars teaches a bag formed of fabric. Schnaars teaches applying a sealant to the interior of the bag by inserting a mandrel into the open end of the bag, inflating the bag, spraying an adhesive/polymer coating onto the interior surface of the bag, and applying a sealant, i.e. plastic liner, onto the interior surface of the bag by blowing a propellant gas into the sealant such that the sealant is affixed to the interior surface of the bag (Figures 4-7 and Column 1, lines 22-23 and 57-68 and Column 2, lines 1-5).

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7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Seizert as applied above in paragraph 5, and further in view of Davis (U.S. Patent 4,994,225).

Longardh et al. and Seizert as applied above teach all of the limitations in claim 5 except for a specific teaching on the use of different sealants. However, it is noted Longardh et al. as modified by Seizert is not limited to any particular sealant. Absent any unexpected results, one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the sealant in Longardh et al. as modified by Seizert sealants such as polyvinyl chloride, urethanes, etc. as these were well known sealants for sealing fabric air bags as shown for example by Davis.

Davis is directed to the production of an air bag. Davis teaches the air bag comprises a fabric bag that is sealed with a polymeric coating that is for example polyvinyl chloride, silicone, urethane, etc. (Column 3, lines 1-5 and 9-11).

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Seizert as applied above in paragraph 5, and further in view of Kinoshita et al. (U.S. Patent 4,496,517).

Longardh et al. and Seizert as applied above teach all of the limitations in claims 6 and 7 except for a specific teaching on using a heated fabric bag and heated propellant gas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Longardh et al. as modified by Seizert to heat the fabric bag, i.e. mold, and propellant gas as it was well known in the art to heat these areas during blow molding to thermally fix the parison within the fabric as shown for example by Kinoshita et al.

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Kinoshita et al. are directed to forming a container using a blow molding process.

Kinoshita et al. teach introducing a parison into a mold and blow molding the parison using a propellant gas into the shape of a container. Kinoshita et al. teach heating the mold and propellant gas to thermally fix the parison (Column 2, lines 29-34 and 55-58 and Column 3, lines 29-33).

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Seizert as applied above in paragraph 5, and further in view of Welch et al. (U.S. Patent 6,276,712).

Longardh et al. and Seizert as applied above teach all of the limitations in claim 9 except for a specific teaching on forming a side curtain airbag. It is noted Longardh et al. as modified by Seizert is not limited any particular type of airbag such that it would have been well with the purview of one of ordinary skill in the art at the time the invention was made to form as the air bag taught by Longardh et al. as modified by Seizert a side curtain air bag as side curtain air bags were well known in the art for being formed of the same materials as conventional air bags as shown for example by Welch et al.

Welch et al. are directed to a side curtain air bag that is formed of a fabric bag coated with a polymer sealant (Column 1, line19 and Column 3, lines 5-12).

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10. Claims 1, 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. in view of Mueller et al. (U.S. Patent 5,700,870) and Schnaars.

Longardh et al. are directed to a method for forming inflatable air bags utilized in motor vehicles. Longardh et al. teach the bag is formed of synthetic fiber, i.e. fabric. Longardh et al. further teach the inside of the bag is coated with a polymer, e.g. silicone, to provide a sealant layer (Abstract and Page 2, lines 9-18). Longardh et al. are silent as to how the sealant is coated onto the inside of the bag. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the sealant coating taught by Longardh et al. by spraying as this was a well known technique in the art for applying the sealant as shown for example by Mueller et al. As to spraying the sealant inside the bag, it would have been obvious to one of ordinary skill in the art at the time the invention was made to spray the sealant taught by Longardh et al. as modified by Mueller et al. directly into the bag as it was well known in the art to apply coating into a fabric bag by spraying as shown for example by Schnaars.

Mueller et al. are directed to coating airbags with a polymeric sealant. Mueller et al. teach using conventional methods to apply the coatings including spraying (Column 4, lines 41-45).

Schnaars is directed to a method for forming a bag with a sealed interior, i.e. an air bag. Schnaars teaches a bag formed of fabric. Schnaars teaches applying a sealant to the interior of the bag by inserting a mandrel into the open end of the bag, inflating the bag, spraying an adhesive/polymer coating onto the interior surface of the bag, and applying a sealant, i.e. plastic liner, onto the interior surface of the bag by blowing a propellant gas into the sealant such that

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the sealant is affixed to the interior surface of the bag (Figures 4-7 and Column 1, lines 22-23 and 57-68 and Column 2, lines 1-5).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al., Mueller et al., and Schnaars as applied above in paragraph 10, and further in view of Davis.

Longardh et al., Mueller et al., and Schnaars as applied above teach all of the limitations in claim 5 except for a specific teaching on the use of different sealants. However, it is noted Longardh et al. as modified by Mueller et al. and Schnaars are not limited to any particular sealant. Absent any unexpected results, one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the sealant in Longardh et al. as modified by Mueller et al. and Schnaars sealants such as polyvinyl chloride, urethanes, etc. as these were well known sealants for sealing fabric air bags as shown for example by Davis.

Davis is directed to the production of an air bag. Davis teaches the air bag comprises a fabric bag that is sealed with a polymeric coating that is for example polyvinyl chloride, silicone, urethane, etc. (Column 3, lines 1-5 and 9-11).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al., Mueller et al., and Schnaars as applied above in paragraph 10, and further in view of Welch et al.

Longardh et al., Mueller et al., and Schnaars as applied above teach all of the limitations in claim 9 except for a specific teaching on forming a side curtain airbag. It is noted Longardh et al. as modified by Mueller et al. and Schnaars is not limited any particular type of airbag such that it would have been well within the purview of one of ordinary skill in the art at the time the invention was made to form as the air bag taught by Longardh et al. as modified by Mueller et al.

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and Schnaars a side curtain air bag as side curtain air bags were well known in the art for being formed of the same materials as conventional air bags as shown for example by Welch et al.

Welch et al. are directed to a side curtain air bag that is formed of a fabric bag coated with a polymer sealant (Column 1, line 19 and Column 3, lines 5-12).

13. Claims 1, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. in view of Schnaars.

Longardh et al. are directed to a method for forming inflatable air bags utilized in motor vehicles. Longardh et al. teach the bag is formed of synthetic fiber, i.e. fabric. Longardh et al. further teach the inside of the bag is coated with a polymer, e.g. silicone, to provide a sealant layer (Abstract and Page 2, lines 9-18). Longardh et al. are silent as to how the sealant is coated onto the inside of the bag. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the sealant coating taught by Longardh et al. using a method wherein the sealant is applied into the interior of the bag by blowing the sealant with a propellant gas as this was a well known technique in the art for coating the interior of fabric bags with a polymeric sealant wherein the sealant becomes bonded to the fabric as shown for example by Schnaars.

Schnaars is directed to a method for forming a bag with a sealed interior, i.e. an air bag. Schnaars teaches a bag formed of fabric. Schnaars teaches applying a sealant to the interior of the bag by inserting a mandrel into the open end of the bag, inflating the bag, spraying an adhesive/polymer coating onto the interior surface of the bag, and applying a sealant, i.e. plastic liner, onto the interior surface of the bag by blowing a propellant gas into the sealant such that

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the sealant is affixed to the interior surface of the bag (Figures 4-7 and Column 1, lines 22-23 and 57-68 and Column 2, lines 1-5).

14. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Schnaars as applied above in paragraph 13, and further in view of Seizert.

Longardh et al. and Schnaars as applied above teach all of the limitations in claims 2 and 3 except for a teaching on applying the sealant directly as a parison, i.e. applying a sealant that is not a preformed bag. It would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the sealant taught by Longardh et al. as modified by Schnaars directly as a parison as this was a well known technique to use such that the sealant can be applied directly after extrusion as shown for example by Seizert.

Regarding claim 3, as to applying the adhesive to the parison as opposed to the interior surface of the fabric bag, it would have been well within the purview of one of ordinary skill in the art to apply the adhesive to either the interior surface of the fabric bag or the outside surface of the parison as both would accomplish the same, i.e. adhering the sealant to the fabric.

Seizert is directed to a method for forming an air bag by blow molding. Seizert teaches a fabric bag structure comprising fabric in areas where reinforcement is needed. Seizert teaches applying a polymeric sealant coating to the fabric to form an air bag. Seizert teaches the sealant is in the form of a parison carried on a mandrel wherein propellant gas is blown into the parison from the mandrel to form a sealant coating on the interior of the fabric (Figures 4-6 and Column 5, lines 21-24 and 28-31 and Column 6, lines 3-55).

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Schnaars as applied above in paragraph 13, and further in view of Davis.

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Longardh et al. and Schnaars as applied above teach all of the limitations in claim 5 except for a specific teaching on the use of different sealants. However, it is noted Longardh et al. as modified by Schnaars is not limited to any particular sealant. Absent any unexpected results, one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the sealant in Longardh et al. as modified by Schnaars sealants such as polyvinyl chloride, urethanes, etc. as these were well known sealants for sealing fabric air bags as shown for example by Davis.

Davis is directed to the production of an air bag. Davis teaches the air bag comprises a fabric bag that is sealed with a polymeric coating that is for example polyvinyl chloride, silicone, urethane, etc. (Column 3, lines 1-5 and 9-11).

16. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al., Schnaars, and Seizert as applied above in paragraph 14, and further in view of Kinoshita et al.

Longardh et al., Schnaars, and Seizert as applied above teach all of the limitations in claims 6 and 7 except for a specific teaching on using a heated fabric bag and heated propellant gas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Longardh et al. as modified by Schnaars and Seizert to heat the fabric bag, i.e. mold, and propellant gas as it was well known in the art to heat these areas during blow molding to thermally fix the parison within the fabric as shown for example by Kinoshita et al.

Kinoshita et al. are directed to forming a container using a blow molding process. Kinoshita et al. teach introducing a parison into a mold and blow molding the parison using a propellant gas into the shape of a container. Kinoshita et al. teach heating the mold and

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propellant gas to thermally fix the parison (Column 2, lines 29-34 and 55-58 and Column 3, lines 29-33).

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longardh et al. and Schnaars as applied above in paragraph 13, and further in view of Welch et al.

Longardh et al. and Schnaars as applied above teach all of the limitations in claim 9 except for a specific teaching on forming a side curtain airbag. It is noted Longardh et al. as modified by Schnaars is not limited any particular type of airbag such that it would have been well with the purview of one of ordinary skill in the art at the time the invention was made to form as the air bag taught by Longardh et al. as modified by Schnaars a side curtain air bag as side curtain air bags were well known in the art for being formed of the same materials as conventional air bags as shown for example by Welch et al.

Welch et al. are directed to a side curtain air bag that is formed of a fabric bag coated with a polymer sealant (Column 1, line 19 and Column 3, lines 5-12).

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John L. Goff
July 31, 2003



Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700